

CLAIMS:

1. A temperature control system for a vehicle which controls a temperature of a storage mechanism (3000) mounted in a vehicle, characterized by comprising:

supply means (3200) for supplying air for controlling a temperature to the storage mechanism (3000);

an inlet port (3310) which is communicated with the supply means (3200); and

changing means (3100) for changing air to be supplied to the storage mechanism (3000) by the supply means (3200) between air whose heat has been exchanged with an air conditioning unit (2000) in an air pipe and air other than the air whose heat has been exchanged with the air conditioning unit (2000), the changing means (3100) being provided in the air pipe between the supply means (3200) and the inlet port (3310).

2. The temperature control system for a vehicle according to claim 1, wherein

the air other than the air whose temperature has been exchanged with the air conditioning unit (2000) is air in a vehicle compartment.

3. The temperature control system for a vehicle according to claim 2, characterized by further comprising:

changing control means (6000) for controlling the changing means (3100) based on a temperature of the storage mechanism (3000) and a temperature in the vehicle compartment.

4. The temperature control system for a vehicle according to claim 1, wherein

the air other than the air whose heat has been exchanged with the air conditioning unit (2000) is air in a vehicle compartment and air in a luggage compartment, and

the changing means (3100) changes the air to be supplied to the storage mechanism (3000) among the air whose heat has been exchanged with the air conditioning unit (2000), air in a vehicle compartment, and air in a luggage compartment.

5. The temperature control system for a vehicle according to claim 4, characterized by further comprising:

changing control means (6000) for controlling the changing means (3100) based on a temperature of the storage mechanism (3000), a temperature in the vehicle compartment

and a temperature in the luggage compartment.

6. The temperature control system for a vehicle according to claim 3 or 5, wherein

the changing control means (6000) controls the changing means (3100) such that, as the temperature of the storage mechanism (3000) becomes higher, air whose temperature is lower is supplied to the storage mechanism (3000).

7. The temperature control system for a vehicle according to claim 3 or 5, wherein

the changing control means (6000) controls the changing means (3100) such that, as the temperature of the storage mechanism (3000) becomes lower, air whose temperature is higher is supplied to the storage mechanism (3000).

8. The temperature control system for a vehicle according to claim 3 or 5, wherein

the changing control means (6000) controls the changing means (3100) based on a change in the temperature of the storage mechanism (3000).

9. The temperature control system for a vehicle according to claim 8, wherein

the changing control means (6000) controls the changing means (3100) such that, as a degree of an increase in the temperature of the storage mechanism (3000) becomes higher, air whose temperature is lower is supplied to the storage mechanism (3000).

10. The temperature control system for a vehicle according to claim 3 or 5, characterized by further comprising:

supply control means (6000) for controlling the supply means (3200) based on the temperature of the storage mechanism (3000).

11. The temperature control system for a vehicle according to claim 10, wherein

the supply control means (6000) controls the supply means (3200) such that the supply means (3200) is operated when the temperature of the storage mechanism (3000) is higher than a predetermined threshold value.

12. The temperature control system for a vehicle according to claim 10, wherein

the supply control means (6000) controls the supply means (3200) such that the supply means (3200) is operated when the temperature of the storage mechanism (3000) is lower

than a predetermined threshold value.

13. The temperature control system for a vehicle according to claim 3 or 5, wherein the supply control means (6000) controls the supply means (3200) based on a change in the temperature of the storage mechanism (3000).

14. The temperature control system for a vehicle according to claim 13, wherein the supply control means (6000) controls the supply means (3200) such that the supply means (3200) is operated when a degree of an increase in the temperature of the storage mechanism (3000) is higher than a predetermined threshold value.

15. The temperature control system for a vehicle according to claim 5, characterized by further comprising:

supply control means (6000) for controlling the supply means (3200) based on the temperature of the storage mechanism (3000), wherein

a low temperature side threshold value and a high temperature side threshold value are set for the temperature of the storage mechanism (3000) in advance,

when the temperature of the storage mechanism (3000) is lower than the low temperature side threshold value, the changing control means (6000) controls the changing means (3100) such that the air whose heat has been exchanged with the air conditioning unit (2000) is used as the air to be supplied to the storage mechanism (3000), and the supply control means (6000) controls the supply means (3200) such that the supply means (3200) is operated,

when the temperature of the storage mechanism (3000) is higher than the low temperature side threshold value and lower than the high temperature side threshold value and the storage mechanism (3000) needs to be heated, the changing control means (6000) controls the changing means (3100) such that one of the air in the vehicle compartment and the air in the luggage compartment, which has the higher temperature, is used as the air to be supplied to the storage mechanism (3000), and the supply control means (6000) controls the supply means (3200) such that the supply means (3200) is operated; and

when the temperature of the storage mechanism (3000) is higher than the high temperature side threshold value and the storage mechanism (3000) need not be cooled nor heated, the supply control means (6000) controls the supply means (3200) such that the supply means (3200) is not operated.

16. The temperature control system for a vehicle according to any one of claims 1 to 15, wherein

the air whose heat has been exchanged with the air conditioning unit (2000) is air whose heat has been exchanged with one of an evaporator and a heater core.

17. The temperature control system for a vehicle according to any one of claims 1 to 16, wherein

the storage mechanism (3000) is mounted in a rear portion of the vehicle,

the air conditioning unit (2000) is a rear air conditioning unit, and

the supply means (3200) is a blower which supplied air to the storage mechanism (3000).

18. The temperature control system for a vehicle according to claim 17, wherein the storage mechanism (3000) is a secondary battery for running.

19. The temperature control system for a vehicle according to claim 17, wherein

the air conditioning unit (2000) includes an evaporator and a heater core for the rear air conditioning unit provided near the storage mechanism (3000) in addition to an evaporator and a heater core for a front air conditioning unit, and

the air whose heat has been exchanged with the air conditioning unit (2000) is air whose heat has been exchanged with one of the evaporator and the heater core of the rear air conditioning unit.